AMENDMENTS TO THE CLAIMS

- 1. (Cancelled)
- 2. (Previously Amended) A method for inhibiting RNase activity of reverse transcriptase comprising the steps of:

administering neomycin to an RNA-DNA hybrid substrate wherein the neomycin binds to the RNA-DNA hybrid substrate, thereby preventing reverse transcriptase from cleaving an RNA strand of the RNA-DNA hybrid substrate.

- 3-5. (Cancelled)
- 6. (Currently Amended) The method of claim 2, wherein the neomycin to RNA-DNA hybrid substrate binding site molar ratio is 1:1.
- 7. (Original) The method of claim 6, wherein the neomycin inhibits reverse transcriptase induced cleavage of the substrate by 80% at the primary site.
- 8. (Currently Amended) The method of claim 2, wherein the neomycin to RNA-DNA hybrid substrate <u>binding site</u> molar ratio is 5:1.
- 9. (Original) The method of claim 8, wherein the neomycin completely inhibits reverse transcriptase induced cleavage of the substrate at the primary site.
 - 10. (Cancelled)
- 11. (Previously Amended) A method for inhibiting HIV-1 reverse transcriptase comprising the step of: administering neomycin to an RNA-DNA hybrid substrate, wherein the neomycin binds to the RNA-DNA hybrid substrate, thereby preventing reverse transcriptase from cleaving an RNA strand of the RNA-DNA hybrid substrate.
 - 12-19. (Cancelled)
- 20. (Previously Added) The method of claim 2, wherein neomycin binds in a double helix groove of the RNA-DNA hybrid substrate.
- 21. (Previously Added) The method of claim 2, wherein RNA-DNA hybrid substrate is in an A-like conformation.
 - 22. (Cancelled).

- 23. (Previously Added) The method of claim 11, wherein the neomycin binds in a double helix groove of the RNA-DNA hybrid substrate.
- 24. (Previously Added) The method of claim 11, wherein RNA-DNA hybrid substrate is in an A-like conformation.